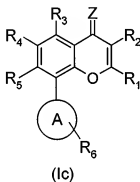


### AMENDMENTS TO THE CLAIMS

Please amend the claims without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents, as follows.

Claim 1 (currently amended)

1. A compound of general formula (Ic), or a stereoisomer, optical isomer, pharmaceutically acceptable salt, or pharmaceutically acceptable solvate thereof



wherein

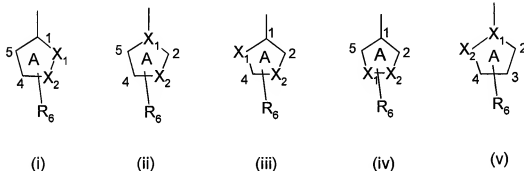
R<sub>1</sub> is phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, nitro, NR<sub>9</sub>R<sub>10</sub>, SR<sub>11</sub>, trifluoromethyl, hydroxyl, cyano, carboxy, C<sub>1</sub>-C<sub>4</sub>-alkoxycarbonyl and -C<sub>1</sub>-C<sub>4</sub>-alkylenehydroxyl, or is a heterocycle, which is a saturated, partially unsaturated or aromatic ring containing 5 or 6 ring atoms of which 1, 2 or 3 are identical or different heteroatoms selected from: nitrogen, oxygen, sulfur, and phosphorus, and where the heterocycle is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, nitro, NR<sub>9</sub>R<sub>10</sub>, SR<sub>11</sub>, trifluoromethyl, hydroxyl, cyano, carboxy, -C<sub>1</sub>-C<sub>4</sub>alkoxycarbonyl and -C<sub>1</sub>-C<sub>4</sub>-alkylenehydroxyl;

R<sub>2</sub> is hydrogen, C<sub>1</sub>-C<sub>6</sub>-alkyl, phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, nitro, NR<sub>9</sub>R<sub>10</sub>, SR<sub>11</sub>, trifluoromethyl, hydroxyl, cyano, carboxy, C<sub>1</sub>-C<sub>4</sub>-alkoxycarbonyl and -C<sub>1</sub>-C<sub>4</sub>-alkylenehydroxyl, OR<sub>11</sub>, halogen, cyano, nitro, NR<sub>9</sub>R<sub>10</sub> or SR<sub>11</sub>;

R<sub>3</sub>, R<sub>4</sub> and R<sub>5</sub> are each independently selected from: hydrogen, C<sub>1</sub>-C<sub>4</sub>alkyl, halogen, OR<sub>11</sub>, C<sub>1</sub>-C<sub>4</sub>alkylcarbonyloxy, NR<sub>9</sub>R<sub>10</sub>, SO<sub>2</sub>NR<sub>9</sub>R<sub>10</sub>, carboxyl, cyano and nitro;

Z is O or S;

A is a saturated or unsaturated 5-membered ring and represented by any one of the general structures (i) to (v);



wherein X<sub>1</sub> and X<sub>2</sub> are each independently selected from: a carbon atom and a ~~heteroatom~~ selected from: oxygen, sulfur, and nitrogen atom, provided that at least one of X<sub>1</sub> and X<sub>2</sub> is a nitrogen atom ~~heteroatom~~, and when wherein the X<sub>1</sub> or X<sub>2</sub> is a nitrogen atom, it is at least monosubstituted by R<sub>13</sub>, wherein R<sub>13</sub> is selected from: hydrogen, unsubstituted C<sub>1</sub>-C<sub>6</sub>-alkyl, or C<sub>1</sub>-C<sub>6</sub>-alkyl substituted by halogen, hydroxyl or carboxyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl, hydroxyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>4</sub>alkylcarbonyl, toluenesulfonyl, cyano, SO<sub>2</sub>R<sub>10</sub>, -CO(CH<sub>2</sub>)<sub>m</sub>R<sub>14</sub> and phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C<sub>1</sub>-C<sub>4</sub>alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, nitro, NR<sub>9</sub>R<sub>10</sub>, SR<sub>11</sub>, trifluoromethyl, hydroxyl, cyano, carboxy, C<sub>1</sub>-C<sub>4</sub>-alkoxycarbonyl and -C<sub>1</sub>-C<sub>4</sub>-alkylenehydroxyl; and

R<sub>6</sub> is -C<sub>1</sub>-C<sub>4</sub>alkyleneOR<sub>11</sub>;

R<sub>9</sub> and R<sub>10</sub> are each independently selected from: hydrogen, C<sub>1</sub>-C<sub>4</sub>alkyl, C<sub>1</sub>-C<sub>4</sub>alkanoyl, C<sub>1</sub>-C<sub>4</sub>-alkoxycarbonyl, C<sub>1</sub>-C<sub>4</sub>alkylcarbonyl, carboxamide and sulfonamide;

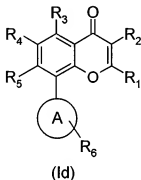
R<sub>11</sub> is hydrogen, C<sub>1</sub>-C<sub>4</sub>alkyl, C<sub>1</sub>-C<sub>4</sub>-alkanoyl, or C<sub>1</sub>-C<sub>4</sub>-alkoxycarbonyl;

R<sub>14</sub> is hydrogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, hydroxyl, -NR<sub>9</sub>R<sub>10</sub>, halogen, -SH, or -S-C<sub>1</sub>-C<sub>4</sub>-alkyl; and

m is an integer of 0 to 6.

Claim 2 (currently amended)

2. A compound of the general formula (Id), or a stereoisomer, optical isomer, pharmaceutically acceptable salt, or pharmaceutically acceptable solvate thereof



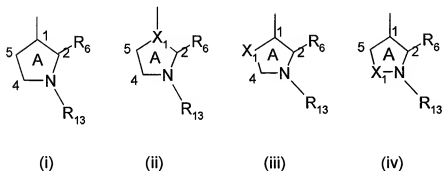
wherein

R<sub>1</sub> is phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, nitro, NR<sub>9</sub>R<sub>10</sub>, SR<sub>11</sub>, trifluoromethyl, hydroxyl, cyano, carboxy, C<sub>1</sub>-C<sub>4</sub>alkoxycarbonyl and -C<sub>1</sub>-C<sub>4</sub>-alkylenehydroxyl, or is a heterocycle, which is a saturated, partially unsaturated or aromatic ring containing 5 or 6 ring atoms of which 1, 2 or 3 are identical or different heteroatoms selected from: nitrogen, oxygen, sulfur, and phosphorus, and where the heterocycle is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, nitro, NR<sub>9</sub>R<sub>10</sub>, SR<sub>11</sub>, trifluoromethyl, hydroxyl, cyano, carboxy, C<sub>1</sub>-C<sub>4</sub>alkoxycarbonyl and -C<sub>1</sub>-C<sub>4</sub>-alkylenehydroxyl;

R<sub>2</sub> is hydrogen, C<sub>1</sub>-C<sub>6</sub>-alkyl, phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, nitro, NR<sub>9</sub>R<sub>10</sub>, SR<sub>11</sub>, trifluoromethyl, hydroxyl, cyano, carboxy, C<sub>1</sub>-C<sub>4</sub>-alkoxycarbonyl and -C<sub>1</sub>-C<sub>4</sub>-alkylenehydroxyl, OR<sub>11</sub>, halogen, cyano, nitro, NR<sub>9</sub>R<sub>10</sub> or SR<sub>11</sub>;

$R_3$ ,  $R_4$  and  $R_5$  are each independently selected from: hydrogen,  $C_1$ - $C_4$ alkyl,  $C_1$ - $C_4$ alkoxyl, halogen,  $OR_{11}$ ,  $C_1$ - $C_4$ alkylcarbonyloxy,  $NR_9R_{10}$ ,  $SO_2NR_9R_{10}$ , carboxy, cyano and nitro;

A is a saturated or unsaturated 5-membered ring and represented by any one of the general structures (i) to (iv);



wherein  $X_1$  is either a carbon atom or a heteroatom selected from: oxygen, sulfur, and nitrogen atom, except that in structures (ii) and (iv)  $X_1$  is either a carbon atom or a nitrogen atom, and wherein  $R_{13}$  is selected from: hydrogen, unsubstituted  $C_1$ - $C_6$ alkyl, or  $C_1$ - $C_6$ alkyl substituted by halogen, hydroxyl or carboxyl,  $C_2$ - $C_6$ alkenyl, hydroxyl,  $C_1$ - $C_6$ alkoxy,  $C_1$ - $C_4$ alkylcarbonyl, toluenesulfonyl, cyano,  $SO_2R_{10}$  and  $-CO(CH_2)_mR_{14}$ , phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen,  $C_1$ - $C_4$ alkyl,  $C_1$ - $C_4$ alkoxy, nitro,  $NR_9R_{10}$ ,  $SR_{11}$ , trifluoromethyl, hydroxyl, cyano, carboxy,  $C_1$ - $C_4$ alkoxycarbonyl and  $-C_1$ - $C_4$ alkylenehydroxyl;

$R_6$  is  $-C_1$ - $C_4$ alkylene $OR_{11}$ ;

$R_9$  and  $R_{10}$  are each independently selected from: hydrogen,  $C_1$ - $C_4$ alkyl,  $C_1$ - $C_4$ alkanoyl,  $C_1$ - $C_4$ alkoxycarbonyl,  $C_1$ - $C_4$ alkylcarbonyl, carboxamide and sulfonamide;

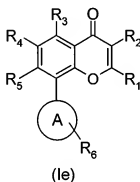
$R_{11}$  is hydrogen,  $C_1$ - $C_4$ alkyl,  $C_1$ - $C_4$ alkanoyl, or  $C_1$ - $C_4$ alkoxycarbonyl;

$R_{14}$  is hydrogen,  $C_1$ - $C_4$ alkyl, hydroxyl,  $-NR_9R_{10}$ , halogen,  $-SH$ , or  $-S-C_1$ - $C_4$ alkyl; and

m is an integer of 0 to 6 .

Claim 3 (currently amended)

3. A compound of the general formula (Ie), or a stereoisomer, optical isomer, pharmaceutically acceptable salt, or pharmaceutically acceptable solvate thereof



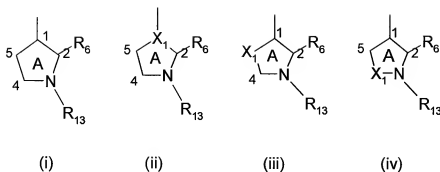
wherein

R<sub>1</sub> is phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, nitro, NR<sub>9</sub>R<sub>10</sub>, SR<sub>11</sub>, trifluoromethyl, hydroxyl, cyano, carboxy, C<sub>1</sub>-C<sub>4</sub>-alkoxycarbonyl and -C<sub>1</sub>-C<sub>4</sub>-alkylenehydroxyl, or is a heterocycle, which is a saturated, partially unsaturated or aromatic ring containing 6 ring atoms of which 1, 2 or 3 are identical or different heteroatoms selected from: nitrogen, oxygen and sulfur, and where the heterocycle is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, nitro, NR<sub>9</sub>R<sub>10</sub>, SR<sub>11</sub>, trifluoromethyl, hydroxyl, cyano, carboxy, C<sub>1</sub>-C<sub>4</sub>alkoxycarbonyl and -C<sub>1</sub>-C<sub>4</sub>-alkylenehydroxyl;

R<sub>2</sub> and R<sub>4</sub> are hydrogen;

R<sub>3</sub> and R<sub>5</sub> are each independently selected from: hydroxyl, C<sub>1</sub>-C<sub>4</sub>alkoxyl and C<sub>1</sub>-C<sub>4</sub>-alkylcarbonyloxy;

A is a saturated or unsaturated 5-membered ring and represented by any one of the general structures (i) to (iv);



wherein  $X_1$  is either a carbon atom or a heteroatom selected from: oxygen, sulfur, and a nitrogen atom, except that in structures (ii) and (iv)  $X_1$  is either a carbon atom or a nitrogen atom, and wherein  $R_{13}$  is selected from: hydrogen, unsubstituted  $C_1$ - $C_6$ -alkyl, or  $C_1$ - $C_6$ -alkyl substituted by halogen, hydroxyl, or carboxyl,  $C_2$ - $C_6$ -alkenyl, hydroxyl,  $C_1$ - $C_6$ -alkoxy,  $C_1$ - $C_4$ -alkylcarbonyl, toluenesulfonyl, cyano,  $SO_2R_{10}$ ,  $-CO(CH_2)_mR_{14}$  and phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen,  $C_1$ - $C_4$ -alkyl,  $C_1$ - $C_4$ -alkoxy, nitro,  $NR_9R_{10}$ ,  $SR_{11}$ , trifluoromethyl, hydroxyl, cyano, carboxy,  $C_1$ - $C_4$ -alkoxycarbonyl and  $-C_1$ - $C_4$ -alkylenehydroxyl;

$R_6$  is  $-C_1$ - $C_4$ -alkylene $OR_{11}$  ;

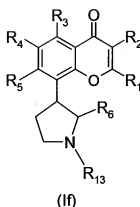
$R_9$  and  $R_{10}$  are each independently selected from: hydrogen,  $C_1$ - $C_4$ -alkyl,  $C_1$ - $C_4$ -alkanoyl,  $C_1$ - $C_4$ -alkoxycarbonyl,  $C_1$ - $C_4$ -alkylcarbonyl, carboxamide and sulfonamide;

$R_{11}$  is hydrogen,  $C_1$ - $C_4$ -alkyl,  $C_1$ - $C_4$ -alkanoyl, or  $C_1$ - $C_4$ -alkoxycarbonyl;

$R_{14}$  is hydrogen,  $C_1$ - $C_4$ -alkyl, hydroxyl,  $-NR_9R_{10}$ , halogen,  $-SH$ , or  $-S-C_1$ - $C_4$ -alkyl; and  $m$  is an integer of 0 to 6.

Claim 4 (previously presented)

4. A compound of the general formula (If), or a stereoisomer, optical isomer, pharmaceutically acceptable salt, or pharmaceutically acceptable solvate thereof



wherein

R<sub>1</sub> is phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, nitro, NR<sub>9</sub>R<sub>10</sub>, SR<sub>11</sub>, trifluoromethyl, hydroxyl, cyano, carboxy, C<sub>1</sub>-C<sub>4</sub>alkoxycarbonyl and -C<sub>1</sub>-C<sub>4</sub>-alkylenehydroxyl, or is a heterocycle, which is a saturated, partially unsaturated or aromatic ring containing 6 ring atoms of which 1, 2 or 3 are identical or different heteroatoms selected from: nitrogen, oxygen and sulfur, and where the heterocycle is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, nitro, NR<sub>9</sub>R<sub>10</sub>, SR<sub>11</sub>, trifluoromethyl, hydroxyl, cyano, carboxy, C<sub>1</sub>-C<sub>4</sub>alkoxycarbonyl and -C<sub>1</sub>-C<sub>4</sub>-alkylenehydroxyl;

R<sub>2</sub> and R<sub>4</sub> are hydrogen;

R<sub>3</sub> and R<sub>5</sub> are each independently selected from: hydroxyl, C<sub>1</sub>-C<sub>4</sub>.alkoxyl and C<sub>1</sub>-C<sub>4</sub>-alkylcarbonyloxy;

R<sub>6</sub> is -C<sub>1</sub>-C<sub>4</sub>-alkyleneOR<sub>11</sub>;

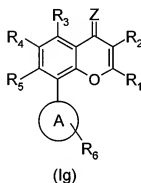
R<sub>9</sub> and R<sub>10</sub> are each independently selected from: hydrogen, C<sub>1</sub>-C<sub>4</sub>.alkyl, C<sub>1</sub>-C<sub>4</sub>.alkanoyl, C<sub>1</sub>-C<sub>4</sub>.alkoxycarbonyl, C<sub>1</sub>-C<sub>4</sub>.alkylcarbonyl, carboxamide and sulfonamide;

R<sub>11</sub> is hydrogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkanoyl, or C<sub>1</sub>-C<sub>4</sub>-alkoxycarbonyl; and

R<sub>13</sub> is hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl.

Claim 5 (previously presented)

5. A compound of the general formula (Ig), or a stereoisomer, optical isomer, pharmaceutically acceptable salt, or pharmaceutically acceptable solvate thereof



wherein

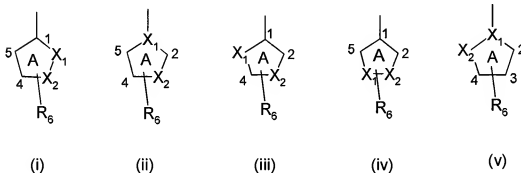
R<sub>1</sub> is phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, nitro, NR<sub>9</sub>R<sub>10</sub>, SR<sub>11</sub>, trifluoromethyl, hydroxyl, cyano, carboxy, C<sub>1</sub>-C<sub>4</sub>alkoxycarbonyl and -C<sub>1</sub>-C<sub>4</sub>-alkylenehydroxyl, or is a heterocycle, which is a saturated, partially unsaturated or aromatic ring containing 5 or 6 ring atoms of which 1, 2 or 3 are identical or different heteroatoms selected from: nitrogen, oxygen, sulfur and phosphorus, and where the heterocycle is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, nitro, NR<sub>9</sub>R<sub>10</sub>, SR<sub>11</sub>, trifluoromethyl, hydroxyl, cyano, carboxy, C<sub>1</sub>-C<sub>4</sub>alkoxycarbonyl and -C<sub>1</sub>-C<sub>4</sub>-alkylenehydroxyl;

R<sub>2</sub> is hydrogen, C<sub>1</sub>-C<sub>6</sub>-alkyl, phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, nitro, NR<sub>9</sub>R<sub>10</sub>, SR<sub>11</sub>, trifluoromethyl, hydroxyl, cyano, carboxy, C<sub>1</sub>-C<sub>4</sub>alkoxycarbonyl and -C<sub>1</sub>-C<sub>4</sub>-alkylenehydroxyl, OR<sub>11</sub>, halogen, cyano, nitro, NR<sub>9</sub>R<sub>10</sub> or SR<sub>11</sub>;

$R_3$ ,  $R_4$  and  $R_5$  are each independently selected from: hydrogen,  $C_1$ - $C_4$ alkyl,  $C_1$ - $C_4$ alkoxy, halogen,  $OR_{11}$ ,  $C_1$ - $C_4$ alkylcarbonyloxy,  $NR_9R_{10}$ ,  $SO_2NR_9R_{10}$ , carboxyl, cyano and nitro;

Z is O or S;

A is a 5-membered saturated ring represented by any one of the general structures (i) to (v);



wherein  $X_1$  and  $X_2$  independently represent a carbon atom and a nitrogen atom provided that at least one of  $X_1$  and  $X_2$  is a nitrogen atom and wherein the nitrogen atom is at least monosubstituted by  $R_{13}$ , wherein  $R_{13}$  is selected from: hydrogen, unsubstituted  $C_1$ - $C_6$ alkyl, or  $C_1$ - $C_6$ alkyl substituted by halogen, hydroxyl, or carboxyl,  $C_2$ - $C_6$ alkenyl, hydroxyl,  $C_1$ - $C_6$ alkoxy,  $C_1$ - $C_4$ alkylcarbonyl, toluenesulfonyl,  $SO_2R_{10}$ ,  $-CO(CH_2)_mR_{14}$ , cyano, phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen,  $C_1$ - $C_4$ alkyl,  $C_1$ - $C_4$ alkoxy, nitro,  $NR_9R_{10}$ ,  $SR_{11}$ , trifluoromethyl, hydroxyl, cyano, carboxy,  $C_1$ - $C_4$ alkoxycarbonyl and  $-C_1$ - $C_4$ alkylenehydroxyl;

$R_6$  is  $C_1$ - $C_4$ alkyl,  $-C_1$ - $C_4$ alkanoyl, hydroxyl,  $C_1$ - $C_4$ alkoxy,  $-C_1$ - $C_4$ alkoxycarbonyl,  $-C_1$ - $C_4$ alkylene $OR_{11}$ ,  $-C_1$ - $C_4$ alkylenehalo,  $-C_1$ - $C_4$ alkylene $NR_9R_{10}$ ,  $-C_1$ - $C_4$ alkylene $C(O)OR_9$ , phenoxy,  $-NR_9R_{10}$ ,  $SR_{12}$ ,  $S(O)_hR_{12}$ ,  $-C(O)R_{12}$  or  $-C(S)R_{12}$ ;

$R_9$  and  $R_{10}$  are each independently selected from: hydrogen,  $C_1$ - $C_4$ alkyl,  $C_1$ - $C_4$ alkanoyl,  $C_1$ - $C_4$ alkoxycarbonyl,  $C_1$ - $C_4$ alkylcarbonyl, carboxamide and sulfonamide;

R<sub>11</sub> is hydrogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkanoyl, or C<sub>1</sub>-C<sub>4</sub>-alkoxycarbonyl;

R<sub>12</sub> is hydrogen, halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, -NR<sub>9</sub>R<sub>10</sub>, or OR<sub>9</sub>,

R<sub>14</sub> is hydrogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, hydroxyl, -NR<sub>9</sub>R<sub>10</sub>, halogen, -SH, or -S-C<sub>1</sub>-C<sub>4</sub>.alkyl;

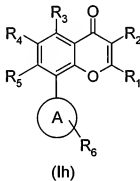
m is an integer of 0 to 6; and

n is an integer of 1 or 2.

Claim 6 (cancelled).

Claim 7 (previously presented)

7. A compound of general formula (Ih), or a stereoisomer, optical isomer, pharmaceutically acceptable salt, or pharmaceutically acceptable solvate thereof



wherein

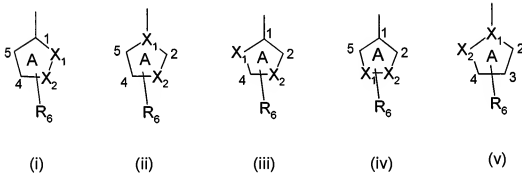
R<sub>1</sub> is phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, nitro, NR<sub>9</sub>R<sub>10</sub>, SR<sub>11</sub>, trifluoromethyl, hydroxyl, cyano, carboxy, C<sub>1</sub>-C<sub>4</sub>alkoxycarbonyl and -C<sub>1</sub>-C<sub>4</sub>-alkylenehydroxyl, or is a heterocycle, which is a saturated, partially unsaturated or aromatic ring containing 6 ring atoms of which 1, 2 or 3 are identical or different heteroatoms selected from: nitrogen, oxygen and

sulfur, and where the heterocycle is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, nitro, NR<sub>9</sub>R<sub>10</sub>, SR<sub>11</sub>, trifluoromethyl, hydroxyl, cyano, carboxy, C<sub>1</sub>-C<sub>4</sub>alkoxycarbonyl and -C<sub>1</sub>-C<sub>4</sub>-alkylenehydroxyl;

R<sub>2</sub> and R<sub>4</sub> are hydrogen;

R<sub>3</sub> and R<sub>5</sub> are each independently selected from: hydroxyl, C<sub>1</sub>-C<sub>4</sub>-alkoxyl and C<sub>1</sub>-C<sub>4</sub>-alkylcarbonyloxy;

A is a 5-membered saturated ring represented by any one of the general structures (i) to (v);



wherein X<sub>1</sub> and X<sub>2</sub> independently represent a carbon atom and a nitrogen atom, provided that at least one of X<sub>1</sub> and X<sub>2</sub> is a nitrogen atom and wherein the nitrogen atom is at least monosubstituted by R<sub>13</sub>, wherein R<sub>13</sub> is selected from: hydrogen, unsubstituted C<sub>1</sub>-C<sub>6</sub>-alkyl, or C<sub>1</sub>-C<sub>6</sub>-alkyl substituted by halogen, hydroxyl, or carboxyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl, hydroxyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>4</sub>-alkylcarbonyl, toluenesulfonyl, cyano, SO<sub>2</sub>R<sub>10</sub>, -CO(CH<sub>2</sub>)<sub>m</sub>R<sub>14</sub> and phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, nitro, NR<sub>9</sub>R<sub>10</sub>, SR<sub>11</sub>, trifluoromethyl, hydroxyl, cyano, carboxy, C<sub>1</sub>-C<sub>4</sub>alkoxycarbonyl and -C<sub>1</sub>-C<sub>4</sub>-alkylenehydroxyl;

R<sub>6</sub> is C<sub>1</sub>-C<sub>4</sub>.alkyl, -C<sub>1</sub>-C<sub>4</sub>.alkanoyl, hydroxyl, C<sub>1</sub>-C<sub>4</sub>.alkoxyl, -C<sub>1</sub>-C<sub>4</sub>.alkoxycarbonyl, -C<sub>1</sub>-C<sub>4</sub>.alkyleneOR<sub>11</sub>, -C<sub>1</sub>-C<sub>4</sub>.alkylenehalo, -C<sub>1</sub>-C<sub>4</sub>.alkyleneNR<sub>9</sub>R<sub>10</sub>, -C<sub>1</sub>-C<sub>4</sub>.alkyleneC(O)OR<sub>9</sub>, phenoxy, -NR<sub>9</sub>R<sub>10</sub>, SR<sub>12</sub>, S(O)<sub>n</sub>R<sub>12</sub>, -C(O)R<sub>12</sub> or -C(S) R<sub>12</sub>;

R<sub>9</sub> and R<sub>10</sub> are each independently selected from: hydrogen, C<sub>1</sub>-C<sub>4</sub>.alkyl, C<sub>1</sub>-C<sub>4</sub>.alkanoyl, C<sub>1</sub>-C<sub>4</sub>.alkoxycarbonyl, C<sub>1</sub>-C<sub>4</sub>.alkylcarbonyl, carboxamide and sulfonamide;

R<sub>11</sub> is hydrogen, C<sub>1</sub>-C<sub>4</sub>.alkyl, C<sub>1</sub>-C<sub>4</sub>.alkanoyl or C<sub>1</sub>-C<sub>4</sub>.alkoxycarbonyl;

R<sub>12</sub> is hydrogen, halogen, C<sub>1</sub>-C<sub>4</sub>.alkyl, -NR<sub>9</sub>R<sub>10</sub>, or OR<sub>9</sub>;

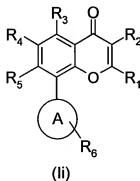
R<sub>14</sub> is hydrogen, C<sub>1</sub>-C<sub>4</sub>.alkyl, hydroxyl, -NR<sub>9</sub>R<sub>10</sub>, halogen, -SH, or -S-C<sub>1</sub>-C<sub>4</sub>.alkyl;

m is an integer of 0 to 6; and

n is an integer of 1 or 2.

Claim 8 (previously presented)

8. A compound of general formula (Ii), or a stereoisomer, optical isomer, pharmaceutically acceptable salt, or pharmaceutically acceptable solvate thereof



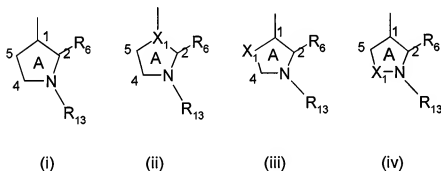
wherein

$R_1$  is phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen,  $C_1$ - $C_4$ -alkyl,  $C_1$ - $C_4$ -alkoxy, nitro,  $NR_9R_{10}$ ,  $SR_{11}$ , trifluoromethyl, hydroxyl, cyano, carboxy,  $C_1$ - $C_4$ alkoxycarbonyl and  $-C_1$ - $C_4$ -alkylenehydroxyl, or is a heterocycle, which is a saturated, partially unsaturated or aromatic ring containing 6 ring atoms of which 1, 2 or 3 are identical or different heteroatoms selected from: nitrogen, oxygen and sulfur, and where the heterocycle is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen,  $C_1$ - $C_4$ -alkyl,  $C_1$ - $C_4$ -alkoxy, nitro,  $NR_9R_{10}$ ,  $SR_{11}$ , trifluoromethyl, hydroxyl, cyano, carboxy,  $C_1$ - $C_4$ alkoxycarbonyl and  $-C_1$ - $C_4$ -alkylenehydroxyl;

$R_2$  and  $R_4$  are hydrogen;

$R_3$  and  $R_5$  are each independently selected from: hydroxyl,  $C_1$ - $C_4$ -alkoxy and  $C_1$ - $C_4$ -alkylcarbonyloxy;

A is a 5-membered saturated ring represented by any one of the general structures (i) to (iv);



wherein  $X_1$  is a carbon atom or a nitrogen atom and wherein  $R_{13}$  is selected from: hydrogen, unsubstituted  $C_1$ - $C_6$ -alkyl, or  $C_1$ - $C_6$ -alkyl substituted by halogen, hydroxyl, or carboxyl,  $C_2$ - $C_6$ -alkenyl, hydroxyl,  $C_1$ - $C_6$ -alkoxy,  $C_1$ - $C_4$ -alkylcarbonyl, toluenesulfonyl, cyano,  $SO_2R_{10}$ ,  $-CO(CH_2)_mR_{14}$  and phenyl, which is unsubstituted or substituted by 1, 2, or 3 identical or different substituents selected from: halogen,  $C_1$ - $C_4$ -alkyl,  $C_1$ - $C_4$ -alkoxy, nitro,  $NR_9R_{10}$ ,  $SR_{11}$ , trifluoromethyl, hydroxyl, cyano, carboxy,  $C_1$ - $C_4$ -alkoxycarbonyl and  $-C_1$ - $C_4$ -alkylenehydroxyl;

R<sub>6</sub> is C<sub>1</sub>-C<sub>4</sub>alkyl, -C<sub>1</sub>-C<sub>4</sub>alkanoyl, hydroxyl, C<sub>1</sub>-C<sub>4</sub>alkoxyl, -C<sub>1</sub>-C<sub>4</sub>alkoxycarbonyl, -C<sub>1</sub>-C<sub>4</sub>alkyleneOR<sub>11</sub>, -C<sub>1</sub>-C<sub>4</sub>alkylenehalo, -C<sub>1</sub>-C<sub>4</sub>alkyleneNR<sub>9</sub>R<sub>10</sub>, -C<sub>1</sub>-C<sub>4</sub>alkyleneC(O)OR<sub>9</sub>, phenoxy -NR<sub>9</sub>R<sub>10</sub>, SR<sub>12</sub>, S(O)<sub>n</sub>R<sub>12</sub>, -C(O)R<sub>12</sub> or -C(S)R<sub>12</sub>;

R<sub>9</sub> and R<sub>10</sub> are each independently selected from: hydrogen, C<sub>1</sub>-C<sub>4</sub>alkyl, C<sub>1</sub>-C<sub>4</sub>alkanoyl, C<sub>1</sub>-C<sub>4</sub>alkoxycarbonyl, C<sub>1</sub>-C<sub>4</sub>alkylcarbonyl, carboxamide and sulfonamide;

R<sub>11</sub> is hydrogen, C<sub>1</sub>-C<sub>4</sub>alkyl, C<sub>1</sub>-C<sub>4</sub>alkanoyl, or C<sub>1</sub>-C<sub>4</sub>alkoxycarbonyl;

R<sub>12</sub> is hydrogen, halogen, C<sub>1</sub>-C<sub>4</sub>alkyl, -NR<sub>9</sub>R<sub>10</sub>, or OR<sub>9</sub>;

R<sub>14</sub> is hydrogen, C<sub>1</sub>-C<sub>4</sub>alkyl, hydroxyl, -NR<sub>9</sub>R<sub>10</sub>, halogen, -SH, or -S-C<sub>1</sub>-C<sub>4</sub>alkyl;

m is an integer of 0 to 6; and

n is an integer of 1 or 2.

Claim 9 (original)

9. A compound as claimed in claim 1, wherein R<sub>1</sub> is phenyl or pyridinyl, substituted by 1, 2 or 3 identical or different substituents selected from: halogen and nitro, R<sub>2</sub> and R<sub>4</sub> are hydrogen, R<sub>3</sub> and R<sub>5</sub> are hydroxyl, A is a saturated 5-membered ring represented by any one of the general structures (i) to (v), wherein X<sub>1</sub>, X<sub>2</sub>, R<sub>6</sub> and R<sub>13</sub> are as defined.

Claim 10 (original)

10. A compound as claimed in claim 1, wherein R<sub>1</sub> is phenyl or pyridinyl, substituted by 1, 2 or 3 identical or different substituents selected from: halogen and nitro, R<sub>2</sub> and R<sub>4</sub> are hydrogen, R<sub>3</sub> and R<sub>5</sub> are hydroxyl, A is a saturated 5-membered ring represented by any one of the general structures (i) to (v), wherein X<sub>1</sub> is carbon, X<sub>2</sub> is nitrogen, R<sub>6</sub> is -C<sub>1</sub>-C<sub>4</sub>alkylenehydroxyl, and R<sub>13</sub> is C<sub>1</sub>-C<sub>4</sub>alkyl.

Claim 11 (previously presented)

11. A compound of the general formula (Ig) as claimed in claim 5, which is:

(+/-)-*trans*-2-(2-Chloro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+)-*trans*-2-(2-Chloro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+)-*trans*-2-(2-Chloro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(-)-*trans*-2-(2-Chloro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(-)-*trans*-2-(2-Chloro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+)-*trans*-2-(2-Bromo-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+)-*trans*-2-(2-Bromo-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+)-*trans*-2-(4-Bromo-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+)-*trans*-2-(4-Bromo-phenyl)-5-hydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-7-methoxy-chromen-4-one;

(+)-*trans*-2-(4-Bromo-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+)-*trans*-2-(3-Chloro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+)-*trans*-2-(3-Chloro-phenyl)-5-hydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-7-methoxy-chromen-4-one;

(+)-*trans*-2-(3-Chloro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+)-*trans*-8-(2-Hydroxymethyl-1-methyl-pyrrolidin-3-yl)-2-(2-iodo-phenyl)-5,7-dimethoxy-chromen-4-one;

(+)-*trans*-5,7-Dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-2-(2-iodo-phenyl)-chromen-4-one;

(+)-*trans*-2-(2-Fluoro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+)-*trans*-2-(2-Fluoro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+)-*trans*-2-(3-Fluoro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+)-*trans*-2-(3-Fluoro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+)-*trans*-2-(2,6-Difluoro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+)-*trans*-2-(2,6-Difluoro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+/-)-*trans*-4-[8-(2-Hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-4-oxo-4H-chromen-2-yl]-benzonitrile;

(+/-)-*trans*-4-[5,7-Dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-4-oxo-4H-chromen-2-yl]-benzonitrile;

(+)-*trans*-4-[8-(2-Hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-4-oxo-4H-chromen-2-yl]-benzonitrile;

(+)-*trans*-4-[5,7-Dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-4-oxo-4H-chromen-2-yl]-benzonitrile;

(+/-)-*trans*-8-(2-Hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-2-(4-trifluoromethyl-phenyl)-chromen-4-one;

(+/-)-*trans*-5,7-Dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-2-(4-trifluoromethyl-phenyl)-chromen-4-one;

(+)-*trans*-8-(2-Hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-2-(4-trifluoromethyl-phenyl)-chromen-4-one;

(+)-*trans*-5,7-Dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-2-(4-trifluoromethyl-phenyl)-chromen-4-one;

(-)-*trans*-8-(2-Hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-2-(4-trifluoromethyl-phenyl)-chromen-4-one;

(-)-*trans*-5,7-Dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-2-(4-trifluoromethyl-phenyl)-chromen-4-one;

(+)-*trans*-8-(2-Hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-2-phenyl-chromen-4-one;

(+)-*trans*-5,7-Dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-2-phenyl-chromen-4-one;

(+)-*trans*-8-(2-Hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-2-thiophen-2-yl-chromen-4-one;

(+)-*trans*-5,7-Dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-2-thiophen-2-yl-chromen-4-one;

(+)-*trans*-4-[5,7-Dihydroxy-8-(2-Hydroxymethyl-1-methyl-pyrrolidin-3-yl)-4-oxo-4H-chromen-2-yl]-3-methyl-benzonitrile;

(+)-*trans*-4-[8-(2-Hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-4-oxo-4H-chromen-2-yl]-3-methyl-benzonitrile;

(+/-)-*trans*-2-(2-Bromo-5-methoxy-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+/-)-*trans*-2-(2-Bromo-5-methoxy-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+)-*trans*-2-(2-Bromo-5-methoxy-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+)-*trans*-2-(2-Bromo-5-methoxy-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+/-)-*trans*-2-(2-Bromo-5-hydroxy-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+)-*trans*-2-(2-Bromo-5-hydroxy-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+/-)-*trans*-2-[(3,5-Bis-trifluoromethyl)-phenyl]-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+/-)-*trans*-2-[(3,5-Bis-trifluoromethyl)-phenyl]-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+)-*trans*-2-(2-Chloro-5-methyl-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+)-*trans*-2-(2-Chloro-5-methyl-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+)-*trans*-2-(2-Bromo-5-nitro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+/-)-*trans*-2-(2-Bromo-5-nitro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dihydroxy-chromen-4-one;

(+/-)-*trans*-2-(2-Chloro-pyridin-3-yl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+/-)-*trans*-2-(2-Chloro-pyridin-3-yl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+/-)-*trans*-2-(2-Bromo-5-nitrophenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dihydroxy-chromen-4-one;

(+)-*trans*-2-(2-Chloro-pyridin-3-yl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+/-)-*trans*-8-(2-Hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-2-(4-nitrophenyl)-4H-chromen-4-one;

(+/-)-*trans*-5,7-Dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-2-(4-nitrophenyl)-chromen-4-one;

(+/-)-*trans*-2-(4-Aminophenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+/-)-*trans*-8-(2-Hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-2-(2-methoxy-phenyl)-chromen-4-one;

(+/-)-*trans*-5,7-Dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-2-(2-hydroxy-phenyl)-chromen-4-one;

(+)-*trans*-3-Chloro-4-[8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-4-oxo-4H-chromen-2-yl]-benzonitrile;

(+)-*trans*-3-Chloro-4-[5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-4-oxo-4H-chromen-2-yl]-benzonitrile;

(+)-*trans*-2-(4-Bromo-2-chloro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+)-*trans*-2-(4-Bromo-2-chloro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+/-)-*trans*-2-(2-Chloro-4-dimethylamino-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+/-)-*trans*-2-(2-Chloro-4-methylamino-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+/-)-*trans*-2-(2-Chloro-4-methoxy-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+/-)-*trans*-2-(2-Chloro-4-hydroxy-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+/-)-*trans*-2-(2-Chloro-5-fluoro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+/-)-*trans*-2-(2-Chloro-5-fluoro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+/-)-*trans*-2-(2-Chloro-5-methoxy-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+/-)-*trans*-2-(2-Chloro-5-hydroxy-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+/-)-*trans*-2-(2-Chloro-5-methoxy-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+/-)-*trans*-8-(2-Azidomethyl-1-methyl-pyrrolidin-3-yl)-2-(2-chloro-phenyl)-5,7-dimethoxy-chromen-4-one;

(+/-)-*trans*-8-(2-Aminomethyl-1-methyl-pyrrolidin-3-yl)-2-(2-chloro-phenyl)-5,7-dimethoxy-chromen-4-one;

(+/-)-*trans*-8-(2-Aminomethyl-1-methyl-pyrrolidin-3-yl)-2-(2-chloro-phenyl)-5,7-dihydroxy-chromen-4-one;

(+/-)-*trans*-3-{[2-(2-Chloro-phenyl)-5,7-dimethoxy-4-oxo-4H-chromen-8-yl]-1-methyl-pyrrolidin-2-yl}-acetoneitrile;

(+/-)-*trans*-{3-[2-(2-Chloro-phenyl)-5,7-dihydroxy-4-oxo-4H-chromen-8-yl]-1-methyl-pyrrolidin-2-yl}-acetoneitrile;

(+/-)-*trans*-2-[2-Chloro-phenyl-8-(2-mercaptomethyl-1-methyl-pyrrolidin-3-yl)]-5,7-dimethoxy-chromen-4-one;

(+/-)-*trans*-2-(2-Chloro-phenyl)-5,7-dihydroxy-8-(2-mercaptomethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+/-)-*trans*- Acetic acid 3-[2-(2-chloro-phenyl)-5,7-dimethoxy-4-oxo-4H-chromen-8-yl]-1-(4-methoxy-phenyl)-pyrrolidin-2-ylmethyl ester;

(+/-)-*trans*-2-(2-Chloro-phenyl)-8-[2-hydroxymethyl-1-(4-methoxy-phenyl)-pyrrolidin-3-yl]-5,7-dimethoxy-chromen-4-one;

(+/-)-*trans*-2-(2-Chloro-phenyl)-5,7-dihydroxy-8-[2-hydroxymethyl-1-(4-methoxy-phenyl)-pyrrolidin-3-yl]-chromen-4-one;

(+/-)-*trans*-Acetic acid 3-[2-(2-chloro-phenyl)-5,7-dimethoxy-4-oxo-4H-chromen-8-yl]-1-propyl-pyrrolidin-2-ylmethyl ester;

(+/-)-*trans*-2-(2-Chloro-phenyl)-8-(2-hydroxymethyl-1-propyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+/-)-*trans*-2-(2-Chloro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-propyl-pyrrolidin-3-yl)-chromen-4-one;

(+/-)-*trans*-2-(2-Chloro-4-nitro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+/-)-*trans*-2-(2-Bromo-4-nitro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+/-)-*trans*-3-Chloro-4-[5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-4-oxo-4H-chromen-2-yl]-benzoic acid;

(+/-)-*trans*-3-Bromo-4-[5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-4-oxo-4H-chromen-2-yl]-benzoic acid;

(+/-)-*trans*-2-(2-Chloro-4-fluoro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+/-)-*trans*-2-(4-Amino-2-chloro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+/-)-*trans*-2-(2-Bromo-4-fluoro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+/-)-*trans*-2-(4-Amino-2-bromo-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+/-)-*trans*-4-Chloro-3-[5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-4-oxo-4H-chromen-2-yl]-benzoic acid;

(+/-)-*trans*-4-Bromo-3-[5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-4-oxo-4H-chromen-2-yl]-benzoic acid;

(+/-)-*trans*-4-Bromo-3-[5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-4-oxo-4H-chromen-2-yl]-N-hydroxy-benzamide;

(+/-)-*trans*-4-Chloro-3-[5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-4-oxo-4H-chromen-2-yl]-N-hydroxy-benzamide;

(+/-)-*trans*-3-Chloro-4-[5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-4-oxo-4H-chromen-2-yl]-N-hydroxy-benzamide;

(+/-)-*trans*-3-Bromo-4-[5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-4-oxo-4H-chromen-2-yl]-N-hydroxy-benzamide; or

(+/-)-*trans*-2-(2,4-Difluoro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+)-*trans*-2-(2-Chloro-3-fluoro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+)-*trans*-2-(2-Chloro-3-fluoro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+)-*trans*-2-(2-Bromo-3-fluoro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+)-*trans*-2-(2-Bromo-3-fluoro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+)-*trans*-2-(2-Bromo-5-fluoro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+)-*trans*-2-(2-Bromo-5-fluoro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+)-*trans*-2-(2-Chloro-5-iodo-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+)-*trans*-2-(2-Chloro-5-iodo-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+)-*trans*-2-(2-Bromo-5-chloro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+)-*trans*-2-(2-Bromo-5-chloro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+/-)-*trans*-2-(2-Chloro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-1-oxy-pyrrolidin-3-yl)-chromen-4-one;

(+)-*trans*-2-(2-Bromo-4-nitro-phenyl)-8-(2-hydroxymethyl-1-methylpyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+)-*trans*-2-(2-Bromo-4-nitro-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+)-*trans*-2-(4-Amino-2-bromo-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+)-*trans*-2-(4-Amino-2-bromo-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+)-*trans*-2-(2-Bromo-4-methoxy-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one;

(+)-*trans*-2-(2-Bromo-4-methoxy-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+)-*trans*-2-(2-Bromo-4-hydroxy-phenyl)-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one;

(+)-*trans* -Acetic acid 8-(2-acetoxymethyl-1-methyl-pyrrolidin-3-yl)-5-hydroxy-2-(4-nitro-phenyl)-4-oxo-4H-chromen-7-yl ester;

(+)-*trans*-2-(2,4-Dichloro-5-fluoro-phenyl)-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-5,7-dimethoxy-chromen-4-one; or

(+)-*trans*-2-(2,4-Dichloro-5-fluoro-phenyl-5,7-dihydroxy-8-(2-hydroxymethyl-1-methyl-pyrrolidin-3-yl)-chromen-4-one.

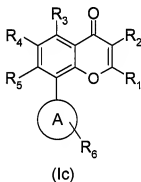
Claim 12 (currently amended)

12. A pharmaceutical composition ~~for the treatment of a disease or disorder mediated by inhibition of cyclin dependent kinase~~, comprising a ~~therapeutically effective amount of a~~ compound of general formula (Ic) or a stereoisomer, optical isomer, pharmaceutically acceptable salt, or pharmaceutically acceptable solvate thereof as claimed in claim 1, and a pharmaceutically acceptable carrier.

Claim 13-19 (cancelled)

Claim 20 (currently amended - withdrawn)

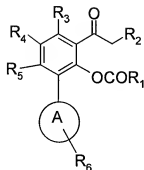
20. A process for the preparation of a compound of general formula (Ic), as claimed in claim 1, or a pharmaceutically acceptable salt thereof:



wherein

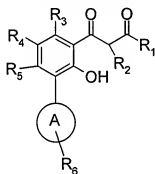
R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub> and A are as defined in claim 1,

which process comprises reacting a compound of formula (XA):



XA

or a compound of formula (XIIA):

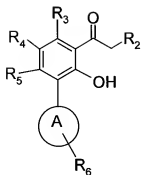


XII A

wherein in each case  $R_1$ ,  $R_2$ ,  $R_3$ ,  $R_4$ ,  $R_5$ ,  $R_6$  and A are as defined in claim 1, with an organic or inorganic base, subsequently adding an acid to the reaction mixture capable of effecting cyclization, then adding an organic or inorganic base, and, optionally if appropriate, converting the compound of formula (Ic) into a pharmaceutically acceptable salt.

Claim 21 (currently amended - withdrawn)

21. A process according to claim 20, wherein the compound of formula (XIIA) is obtained by reacting a compound of formula (XIA)

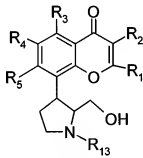


XIA

wherein  $R_2$ ,  $R_3$ ,  $R_4$ ,  $R_5$ ,  $R_6$  and  $\text{A}$  are as defined in claim 20 above, with a carboxylic acid ester, an acid halide, or an activated ester in the presence of an organic or inorganic base in organic or inorganic solvent.

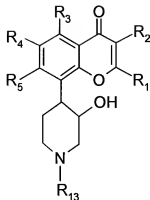
Claim 22 (currently amended - withdrawn)

22. A process for the preparation of a compound of formula (XIIIA) or a pharmaceutically acceptable salt thereof:



XIIIA

wherein  $R_1$ ,  $R_2$ ,  $R_3$ ,  $R_4$ ,  $R_5$  and  $R_{13}$  are as defined in claim 1, comprising reacting a compound of formula (VIIA)



VII A

wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub> and R<sub>13</sub> are as defined in claim 1, with a reagent suitable to effect replacement of the -OH group on the piperidino ring by a leaving group, in the presence of an organic or inorganic base, followed by adding a suitable organic base in the presence of a suitable organic solvent to effect contraction of the piperidino ring, and, optionally if appropriate, converting the resultant compound of formula (XIII) into a pharmaceutically acceptable salt.

Claim 23 (cancelled).

Claim 24 (previously presented)

24. The compound of claim 4, wherein R<sub>11</sub> is hydrogen.

Claim 25 (cancelled)

Claim 26 (cancelled)